### Monitoring Data Record

Project Title: <u>U-2550B NC 18 and I-4</u>	40 Interchange COE	Action ID: <u>2011-00133</u>
Stream Name: UT to East Prong Hun	ting Creek (Site 3) and East	at Prong Hunting Creek (Site 4)
NCDWQ Number: 20101017		
City, County and other Location Information	mation: Site 3 is located bet	ween I-40W off ramp to NC 18
and Bush Drive. Site 4 is located und	er I-40 just West of NC 18.	Both Sites 3 and 4 are located
in Morganton, NC within Burke Count	ty.	
Date Construction Completed: F	Final Planting 3-10-15	Monitoring Year: (1) of 3
Ecoregion: Northern Inner Piedmont	8 digi	t HUC unit 03050101
USGS Quad Name and Coordinates: N		723373, -81.654717 and Site 4:
<u>35.722083, -81.656957</u>		
Rosgen Classification: S	Site 3: C5 or B5c	
Length of Project: Site 3: 481 linear fe	et and Site 4: 115 linear fee	t
Urban or Rural: <u>Urban</u> Waters	shed Size: 120.5 acres	
Monitoring DATA collected by:N	M. Green and J. Young	Date: <u>6/29/15</u>
Applicant Information:		
Name: NCDOT Roadside Envi	ironmental Unit	
Address: 1425 Rock Quarry Ro	oad Raleigh, NC 27610	
Telephone Number: (919) 861-	-3772 Ema	ail address: <u>mlgreen@ncdot.gov</u>
Consultant Information:		
Name:		
Address:		
Telephone Number:	Email address:	
Project Status: Complete		

### Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): <u>Level</u> <u>1</u>

**USACE Permit states:** The permittee shall visually monitor the vegetative planting to assess and ensure complete stabilization of the mitigation stream segments which serve as on-site mitigation. The monitoring shall be conducted annually for a minimum of 3 years after final planting. Photo documentation shall be utilized to document the success of the riparian vegetation and a report shall be submitted to the USACE within sixty (60 days) post monitoring. To prevent mowing by adjacent landowners and maintenance crews, fencing shall be installed around the mitigation site. After 3 years of monitoring, the permittee shall schedule a close out site visit of the on-site mitigation.

**NCDWR Permit states:** The permittee shall visually monitor the vegetative plantings to assess and ensure complete stabilization of the mitigation stream segments. The monitoring shall be conducted annually for a minimum of 3 years after final planting. Photo documentation shall be utilized to document the success of the riparian vegetation and submitted to NCDWR in a final report within sixty (60) days after completion monitoring. To prevent mowing by adjacent landowners and maintenance crews, fencing shall be installed around the mitigation site. After 3 years the NCDOT shall contact the NCDWR to schedule a site visit to "close out" the mitigation site.

Section 1. <u>PHOTO REFERENCE SITES</u> (Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: Site 3 has 4 photo point locations						
which consist of a total of 7 photos plus 2 overview photos. Site 4 has 1 photo point location which consist of 1 photo.						
Dates reference photos have been taken at this site: 6/29/15						
Individual from whom additional photos can be obtained (name, address, phone):						
Other Information relative to site photo reference: A site map is included with this report.						
Section 2. PLANT SURVIVAL Attach plan sheet indicating reference photos.						
Identify specific problem areas (missing, stressed, damaged or dead plantings):						
Estimated causes, and proposed/required remedial action:						
ADDITIONAL COMMENTS: Plant survival is being monitored at UT to East Prong Hunting Creek (Site but, East Prong Hunting Creek (Site 4) will not be monitored for plant survival due to its location underneated bridge crossing I-40. Site 4 was permitted as a day lighted stream only with no planting required.						
March 10, 2015: Site planting completed with silky dogwood, elderberry, buttonbush, tag alder, red chokeber and spicebush.						
June 29, 2015: Year 1 monitoring noted silky dogwood, elderberry, buttonbush, tag alder, red chokeberry, a spicebush were surviving. The South buffer was lacking plant material survival due to lespedeza encroaching in buffer from the fill slope. Other species noted onsite included red maple, jewelweed, Juncus sp., sweetgum, brialespedeza, goldenrod, black willow, and various grasses.						
September 23, 2015: NCDOT sprayed an herbicide application on the lespedeza noted within the South buffer.						
NCDOT plans to do a supplemental planting of the South buffer by March 2016. NCDOT will continue to moni plant survival at the UT to East Prong Hunting Creek (Site 3) in 2016.						

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3

### Section 3. CHANNEL STABILITY

**Visual Inspection:** The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. <u>Physical measurements of channel stability/morphology will not be required.</u> Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

<u>UT to East Prong Hunting Creek (Site 3) and East Prong Hunting Creek (Site 4) are both stable for the Year 1 monitoring evaluation.</u> NCDOT proposes to continue monitoring channel stability in 2016.

Date	Station	Station	Station	Station	Station
Inspected	Number	Number	Number	Number	Number
Structure					
Type					
Is water					
piping					
through or					
around					
structure?					
Head cut or					
down cut					
present?					
Bank or scour					
erosion					
present?					
Other					
problems					
noted?					
	1				<del>-</del>
Bankfull					
event dates					
and how it					
was noted					

#### Section 4. <u>DEBIT LEDGER</u>

The entire East Prong Hunting Creek stream mitigation site was used for the U-2550B project to compensate for unavoidable stream impacts.

## UT to East Prong Hunting Creek (Site 3)



PP#1 Upstream



PP#2 Upstream



PP#3 Upstream



PP#1 Downstream



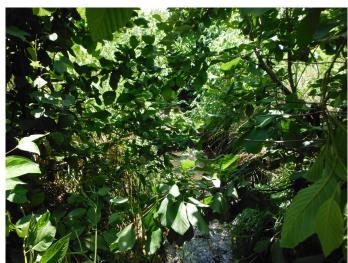
PP#2 Downstream



PP#3 Downstream

June 2015

# UT to East Prong Hunting Creek (Site 3)



PP#4 Upstream



Overview Looking Upstream



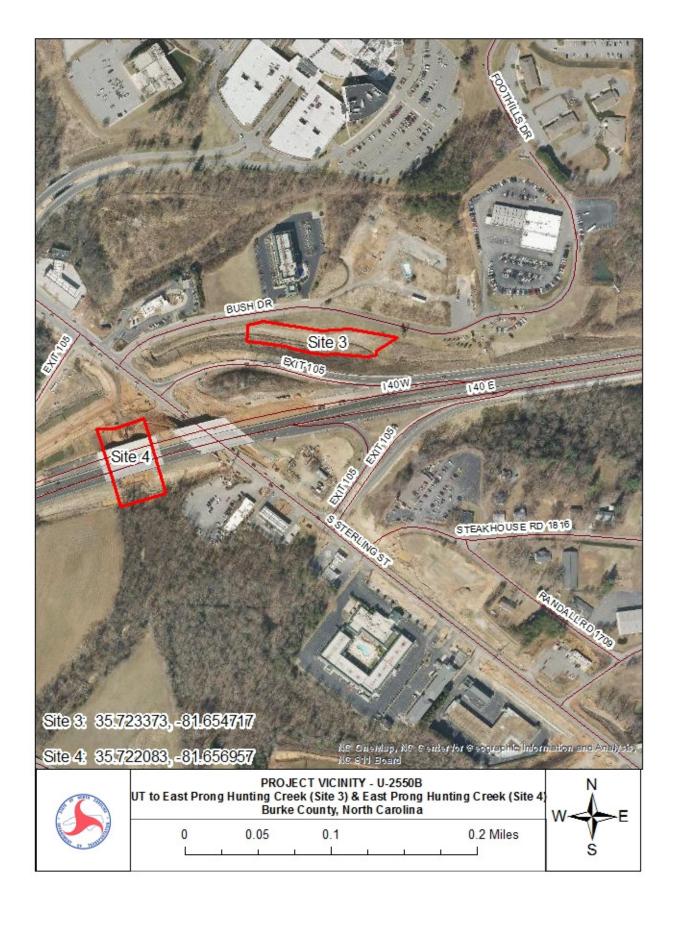
Overview Looking Downstream

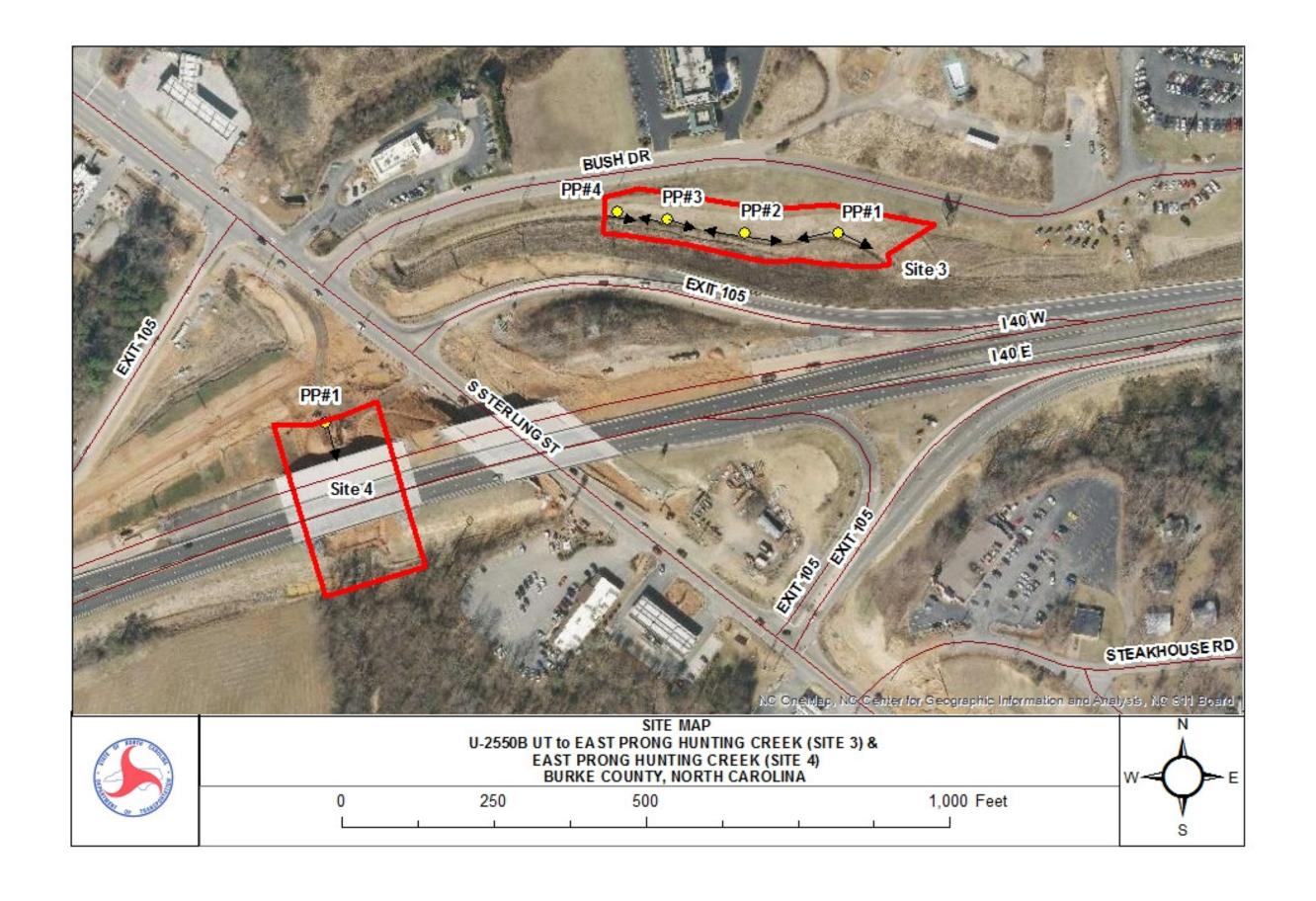
June 2015

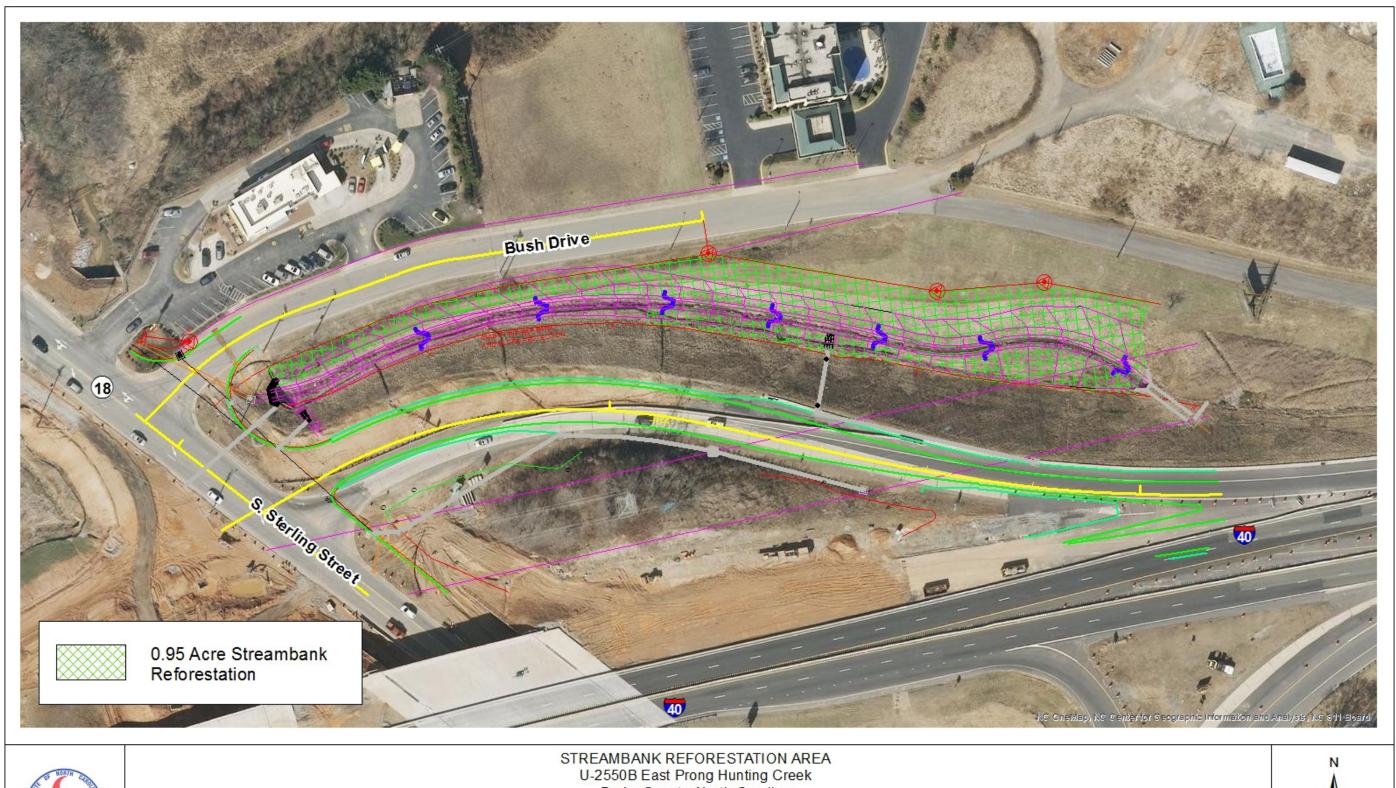
# East Prong Hunting Creek (Site 4)



Photo Point #1 @ Site 4









Burke County, North Carolina

